As envisioned by Mark Weiser as early as 1991, pervasive computing systems and services have truly become integral parts of our daily lives. Tremendous developments in a multitude of technologies ranging from personalized and embedded smart devices (e.g., smartphones, sensors, wearables, IoTs, etc.) to ubiquitous connectivity, via a variety of wireless mobile communications and cognitive networking infrastructures, to advanced computing techniques (including edge, fog and cloud) and user-friendly middleware services and platforms have significantly contributed to the unprecedented advances in pervasive and mobile computing. Cutting-edge applications and paradigms have evolved, such as cyber-physical systems and smart environments (e.g., smart city, smart energy, smart transportation, smart healthcare, etc.) that also involve human in the loop through social interactions and participatory and/or mobile crowd sensing, for example. The goal of pervasive computing systems is to improve human experience and quality of life, without explicit awareness of the underlying communications and computing technologies.

AUDIENCE

Researchers in academics and government or industry labs, students, engineers and professionals in computers, communications and other high-tech industry.

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